Mr. BOEHLERT. Mr. Speaker, I yield myself such time I may consume.

Mr. Speaker, in just about 2 weeks, we will reach the second anniversary of the devastating Indian Ocean tsunami that began off the coast of Indonesia and resulted in the deaths of at least 150,000 people and injuring and dislocation of millions more. It was an event that stunned the entire world and eventually prompted an enormous outpouring of international aid. Among other things, the event was a reminder of the often forgotten but awesome power of nature, which we ignore at our own peril.

But an acknowledgement of nature's power does not mean that we are powerless. Quite the contrary, we needlessly seal our own doom if we fail to take steps that can reduce the significant impact of natural disasters at home and abroad. And in the case of tsunamis, which by definition travel across the seas paying no mind to international borders, the approach has to be global to be effective.

The tsunamis that can cause damage in the U.S. are just as likely to begin overseas as off our own coast. And in addition to humanitarian concerns, the U.S. pays a high price both in aid and in threats to international stability when cataclysmic death results from tsunamis overseas. So we need to take action to improve the understanding of tsunamis by both scientists and the general public, to improve our detection of tsunamis, and to improve our ability to issue warnings about approaching tsunamis, and to ensure populations know how to respond to such warnings.

Happily, we are not starting from scratch in any of these areas. The National Oceanic and Atmospheric Administration already runs research, detection, warning, and outreach programs, and the administration began augmenting those programs in 2005 after the Indian Ocean tsunami. But we need to ensure that the focus on tsunamis continues even as memories of the 2004 tragedy fade, and we need to further strengthen the administration

program along the lines of expert advice we have heard at Science Committee hearings. The experts were particularly concerned that more be done in the area of outreach so that the public understands more about tsunamis and what to do if one is approaching. They also called for more research so we could predict tsunamis and their paths more accurately.

I should add that tsunamis are not a theoretical threat for the U.S. The seismically active west coast is particularly vulnerable and has experienced tsunamis in the past. Even a small tsunami can cause damage. An earthquake off the coast of Japan last month produced a tsunami that hit California with wave surges of only 5 or 6 feet, but it caused an estimated \$700,000 in damage in just one town.

So we need to maintain and strengthen the Nation's tsunami programs. That is exactly what H.R. 1674 would do; it would give specific continuing

congressional direction to efforts in tsunami research, prediction, detection, warning, and outreach, the full spectrum of needed activities. The bill would also improve congressional oversight of the program by requiring updates on the condition of tsunami monitoring equipment and several studies of the overall effectiveness of the tsunami program.

This is a good, carefully targeted, economical, bipartisan bill. I wish to thank my cosponsor, *Jay Inslee*, for all his hard work and persistence on this bill. He understands well how his constituents in Washington State could be in harm's way for a tsunami. I also want to thank my colleagues on both sides of the aisle in the Science Committee who, as usual, contributed to the bill which passed the committee long ago by voice vote. I also want to thank the Transportation and Infrastructure and International Relations Committees for working with us on their jurisdictional claims. And, finally, I want to thank Senator *Ted Stevens* and Senator *Dan Inouye* and their staffs for working with us to put together a compromise bill. This bill is ready for Senate action and should go to the President for signature this week.

Mr. Speaker, we ought to act now to prevent future tragedies from tsunamis. We can't prevent tsunamis, but we can greatly limit the loss of life from them. This bill will help us do just that, not just in the U.S., but abroad, and I urge its passage.

Mr. Speaker, I reserve the balance of my time.

Mr. WU. Mr. Speaker, I yield myself such time as I may consume.

First, Mr. Speaker, I would like to take a moment for an appreciation of Mr. *Boehlert*, the retiring chairman of the Science Committee. He is a consummate legislator; he has talked the talk and walked the walk of promoting the public good over partisanship. He has run the Science Committee in a gentlemanly, bipartisan fashion. And to me, as an aging junior Member of this body, when I think of who I would like to be when I grow up, one of those people is *Sherry Boehlert*.

I rise in support of H.R. 1674, the U.S. Tsunami Warning and Education Act. I am an original cosponsor of this legislation, and I am proud to have worked with Chairman *Boehlert* and Chairman *Ehlers* on this important bill.

We cannot prevent earthquakes and tsunamis, but we can prepare for them. We can ensure that citizens of our coastal communities take appropriate safety steps when the inevitable occurs.

Detection and forecasting are not sufficient. State and local communities must be prepared to disseminate the warning and direct the public to safety areas. Individual citizens must know where to go when they receive a warning. All this must be done well in advance of a tsunami.

I am fortunate to represent a beautiful expanse of the Oregon coast. However, we are also well aware of the potential danger presented by the Cascadia fault located just offshore of Oregon, Washington and California.

In Oregon, we face the threat of a 9.0 Richter Scale coastal earthquake and resulting tsunami. Scientists warn it is not whether this natural disaster will occur, but when. Unlike hurricanes Katrina and Rita, there will be absolutely no warning of the earthquake. When the 9.0 Cascadia earthquake hits, it will rock the ground for 4 to 5 minutes, perhaps raising and dropping the ground level 4 to 8 feet at each rumble. After the quake, Oregonians will have only 10 to 30 minutes to reach high ground before the tsunami rolls ashore.

Oregon has already done a great deal to keep our coastline beautiful and our citizens safe. Cannon Beach, Oregon, was one of the first coastal communities to be designated tsunami-ready by NOAA. H.R. 1674 builds upon the successful partnership that exists between the Federal, State and local governments on the west coast to ensure that all U.S. coastal communities will be prepared to deal with tsunamis.

This bill authorizes the type of comprehensive system we must have if we are to avoid the catastrophic loss of life caused by the December 2004 Indonesian earthquake.

Previously, funding for tsunamis focused more heavily on detection and forecasting systems hardware. While this hardware will help protect the Chinese and Japanese across the ocean in the event of a Cascadia earthquake, it is only mitigation programs focusing on educating the public that are key to protecting Oregonians, Washingtonians and Californians from a Cascadia fault quake.

I am particularly pleased that this legislation includes a specific percentage of funding for tsunami hazard education and mitigation. While I would like to see a more aggressive increase in funding over the lifetime of the bill, I believe these funding levels represent a good start. This program supports vital activities such as inundation mapping, public education and encouraging local communication networks.

Again, I would like to thank Chairman *Boehlert* and Chairman *Ehlers* for working with me in a bipartisan and collegial manner on this legislation. H.R. 1674 is a good bill, and I urge all Members to support it.

Mr. Speaker, I reserve the balance of my time.

## GENERAL LEAVE

Mr. BOEHLERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to

include extraneous material on H.R. 1674, as amended, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. BOEHLERT. Mr. Speaker, let me say to Mr. Wu how much I appreciate his kind remarks. We are partners on the Science Committee in a bipartisan manner to bring forward an agenda from that committee that not only does the committee proud, does this Congress proud, but does this Nation proud.

And one of the privileges of being the chairman of the Science Committee is to work with my fellow chairmen like *Don Young*, and I happen to be a senior member of that committee. I appreciate his leadership, don't always follow it, but I really do appreciate his leadership. We have had a good, constructive working relationship in so many areas, and particularly on this bill.

Mr. Speaker, I am pleased to yield 4 minutes to the gentleman from Alaska (Mr. *Young*).

Mr. YOUNG of Alaska. Mr. Speaker, I thank the gentleman for his kind words. We will miss you. I even tried to get you to run again.

Mr. Speaker, I rise in strong support of H.R. 1674, the Tsunami Warning and Education Act. I want to commend Chairman *Boehlert*, and even Mr. *Inslee* from Washington, Mr. *Wu*, for working on this legislation in an effort to make America's coastal communities safer.

Alaska, my State, is no stranger to the horrible forces of tsunamis. During the past century, four large tsunamis have devastated our coastline. The worst occurred in 1964, when the State was struck by a magnitude 9.4 earthquake. Many of the communities along Prince William Sound and Kodiak Island were completely wiped out. Tsunami waves killed more than 100 people and caused almost \$400 million worth of damage, and that is not in today's dollars, but 1964 dollars, to Alaska alone.

The inability to properly warn Alaskans of these deadly tsunamis prompted the creation of a tsunami warning system for Alaska and the rest of the Pacific. H.R. 1674 enhances and modernizes this existing tsunami warning system. It also expands the detection and warning system to include other vulnerable areas of the United States.

It is not enough to have warning systems in place, people need to know where to go when a tsunami is going to hit. The mitigation program in this

bill helps develop evacuation plans and improves awareness in vulnerable communities.

This bill will help protect Alaskans and other Americans from the same kind of devastation we suffered in 1964. I support this legislation with all my heart.

Mr. WU. Mr. Speaker, I yield such time as she may consume to my friend and colleague from Oregon (Ms. *Hooley*).

(Ms. HOOLEY asked and was given permission to revise and extend her remarks.)

Ms. HOOLEY. Mr. Speaker, I want to take this opportunity to publicly thank Chairman *Boehlert* for the kind of job he does every single day on committee, which is working across the aisle and trying to make this world a better place for people, a little safer, and to really look at the future. He cares very much about the future. And I thank the gentleman from Oregon for all of his work on this legislation and for yielding me this time.

Mr. Speaker, I join my colleagues not only from the west coast but across the country in support of this legislation.

I know that the impetus for this bill was the horrible destruction and loss of life that occurred in Southeast Asia in December of 2004. But one only has to look at last month's news and the tsunami warnings issued along the west coast after an earthquake in Japan to understand that the threat is very real and very important.

In the last 2 years, I have made a lot of trips to the Oregon coast, and talked with many constituents about the possibility of a tsunami of similar size and destructive force striking somewhere along Oregon, Washington or the northern California coast.

I have spoken with State geologists, tsunami researchers at many universities, and emergency management planners, and they all agree it is not a question of if but when the next big tsunami will strike the west coast.

While this legislation or any legislation will not guarantee total protection, I do think that the funding in this bill for education and mitigation programs will go a long way towards making our Nation's citizens more aware of the dangers posed by tsunamis and more prepared to act and ultimately safer. This is truly a bill that will save lives.

I am also pleased there is money included in the legislation that will improve international coordination for detection and warnings, particularly in vulnerable regions like the Indian Ocean. It is in the best interest of the

United States to assist in detection and monitoring of seismic events and tsunamis around the world because a large tsunami generated in Japan has a potential to do major damage to many places along the western coastline.

It is for these reasons that I am proud to be a cosponsor of this legislation and urge my colleagues in the House and the other Chamber to quickly pass this legislation and to begin to provide support for our communities and our citizens.

Mr. BOEHLERT. Mr. Speaker, it is my privilege to yield 4 minutes to the gentleman from Michigan (Mr. *Ehlers*), who is a real leader not just on the Science Committee but in this Congress. We benefit greatly from his special experience as a scientist, a physicist, a respected member of his profession, but also a respected colleague. When *Vern Ehlers* talks, we listen.

Mr. EHLERS. Mr. Speaker, I thank the chairman for his kind words, and also have a good deal of sorrow in my heart because of his departure from this Congress. You have contributed so much, Mr. Chairman, and we deeply appreciate what you have done.

Mr. Speaker, I rise today in strong support of this life-saving bill. H.R. 1674, as amended, will provide the tools our communities need to protect their citizens from the threat of tsunamis.

On December 26, 2004, one of the most devastating tsunamis ever recorded struck the unsuspecting nations of the Indian Ocean Basin. According to the U.N., almost a quarter-million people lost their lives or have never been found, and millions more were displaced. These numbers are impossible to comprehend. It represents more than the number of people killed in the Hiroshima and Nagasaki nuclear weapons blasts. The effects of this tragedy will be felt for generations.

As we recovered from the shock of the event, we naturally began to ask the question: How can we prevent this from happening again?

H.R. 1674, as amended, the Tsunami Warning and Education Act, is part of the answer. Tsunami warning systems can save lives by giving people the time they need to get out of harm's way. This bill will expand the coverage of our tsunami warning systems to cover both the coasts of the U.S., not just the Pacific coast, giving more of our citizens critical protection.

Of equal importance, this bill will help communities develop efficient evacuation plans as well as effective systems for broadcasting warnings. It will also help educate the public so that they know how to respond to those warnings. In short, this bill will give our coastal communities the tools they need to save lives.

Our Nation has been fortunate not to have experienced a tsunami of the magnitude of the Indian Ocean tsunami--yet. Nor have we escaped all harm. Tsunamis have killed over 300 people in the U.S. in my lifetime, and the threat remains real, whether in Alaska or Crescent City, California, or any of our other coastal areas.

It is critical that we give our coastal communities the tools and timely information they need to alert their citizens to coming danger, and passing this bill will help make that happen.

It is unfortunate that it often takes a tragic event to bring natural disaster response planning to our attention. This makes it all the more important that we seize on this opportunity to help prevent future tragedies here in the U.S. and around the world. It is of utmost importance that we pass this bill to establish a tsunami forecast and warning system for the United States, aid other countries in doing the same, and educate the public to understand and heed the warnings.

I want to once again emphasize this bill will save lives. I urge my colleagues to join me in strong support of H.R. 1674, as amended.

Mr. WU. Mr. Speaker, I am pleased to yield 3 minutes to my colleague from Washington (Mr. *Inslee*).

(Mr. INSLEE asked and was given permission to revise and extend his remarks.)

Mr. INSLEE. Mr. Speaker, today we will be taking action so that America's shorelines do not suffer the same fate as Indonesia's on December 26, 2004. I am very pleased that this prolonged effort has arrived today where Congress is going to take measures to give Americans a warning and an ability to avoid damage from a tsunami before that big tsunami hits.

We are in danger and threatened on our coastlines in Washington. First, I will allude to the Pacific. Right off the coastline of Washington and Oregon in the Pacific is what is called the Cascadia subduction zone. This is an evil twin sister of the fault in Indonesia. It is almost identical to the fault off the coastline of Indonesia that caused that quake that cost hundreds of thousands of lives. We have similar subduction zones in the Alaskan-Aleutian zone. We are in the bull's-eye of a potential tsunami. In fact, one happened on February 26, 1700, off the coastline of Washington, and sent what could have been 50-foot waves onto the coastline. We need to do a better job, and this bill is a good start.

The good news is we have some great technology to deal with this issue. We have these detection buoys that use a product developed in Redmond, Washington, in my district, by a company called Paro Scientific. These buoys are anchored off the coastline and they have a little sensor that is on the

bottom of the ocean that can measure the difference of depth of one-tenth of an inch over 2-mile deep water. It is an incredible technology. Then it radios changes in the average depth of the ocean to a satellite. In a matter of seconds, we have a system that can generate information along our coastlines. We have six of these buoys, we need at least 20 in the Pacific. For the first time, this bill will put some buoys in the Atlantic as well.

This will be a first international tsunami warning system using what are called piezometers to measure the depth of the ocean.

The second thing the bill is going to do is the critical link in the chain of warning because buoys aren't enough. We have got to have a way to warn people, to educate people, to have systems in place so that they can evacuate along the coastlines. A little community called LaPush, Washington now has a system where they can move the whole city in about 12 to 15 minutes. We need to have those systems, and this bill is going to do that.

I want to say there is an additional benefit of this bill. False alarms happen as well. And when false alarms happen, we lose millions of dollars when we have false alarms. This whole system will reduce false alarms so that for the first time we can have a credible, meaningful, reliable tsunami detection and warning system in this country. It is overdue. I am glad we are going to have it happen. It is one of the crowning achievements of the great career of Chairman **SHERWOOD BOEHLERT**, who has done such great work for the environment and for science. We are all going to miss his great leadership.

I want to note a fellow who just left the Speaker's chair, Representative **CHARLIE BASS**, who hopefully will take credit for this as well for his great environmental stewardship. And it is a good day for America's shorelines to protect us from tsunamis.

Mr. BOEHLERT. Mr. Speaker, I yield myself such time as I may consume.

I want to thank Mr. *Inslee* for those very kind comments. I want to thank all my colleagues. It has been a great privilege to work with you and for you and for this great institution.

I also want to observe, before we bring this to a close, the great work of the staff on both sides of the aisle who have labored long and hard, almost 2 years on this bill alone. We don't give enough recognition to the staff. Those of us who are more visible, we come before the House and we are recorded on C-SPAN and everybody says they are doing some good deeds. But the real driving force behind so much of what we do is the very able professional staff that we literally are blessed with, both Democrat and Republican.

And this comes from a former staff member, but I came to Capitol Hill 42 years ago as a starry-eyed young staffer. I got 3 years off for good behavior. I was elected county executive back home, and for the past 24 years I have

been privileged to serve in my own right as a Member. But in those 42 years, one of the most dramatic changes, and people are asking me this all the time as I am taking leave, what has changed about the House and about Congress, this institution? One of the most dramatic changes that is so often overlooked is a change for the good, for the positive, the very high degree of professionalism so evident in the staffs of the committees. And I take the Science Committee as a classic example of how it should be done by all. The professionalism, the hard work, dedication on both sides of the aisle.

And we are going into a new chapter. We as Republicans are going from the majority to the minority. The Democrats are going from the minority to the majority. And people are saying, well, what is going to change? Well, I will tell you what is not going to change in the Science Committee. It is the working relationship across that center divide, the professionals who day in and day out prepare us for the debates, the hearings, and for the activities that we are about. That is not going to change. The Democrats will have a few more and the Republicans will have a few less, but I guarantee you this: As the next Congress comes to a close and people are looking back on its performance, I fully expect that the Science Committee once again will be one of the stars in this Chamber.

So with that, let me say to my colleagues on the committee how fortunate I consider myself to have had the privilege of working with and for you over the years, and as I say to all my colleagues in this Chamber, I urge your support for H.R. 1674, as amended. It is a bill that demonstrates that when we work together, we can accomplish so much for so many.

Mr. Speaker, I insert an exchange of letters between the Committees on Science and International Relations in the **RECORD**.

## • [Begin Insert]

I want to thank the staff on both sides of the aisle, who have labored for more than 2 years on this bill. That includes Eric Webster, who has since moved on to NOAA, and David Goldston, Sara Gray, Chad English, and especially Amy Carroll, who has worked tirelessly to keep this bill moving forward

• [End Insert]

Congress of the United States, Committee on International Relations,

Washington, DC, December 6, 2006. Hon. **SHERWOOD BOEHLERT,** Chairman, Committee on Science, Washington, DC. **DEAR MR. CHAIRMAN:** I am writing regarding the jurisdictional interest of the Committee on International Relations in H.R. 1674, the Tsunami Warning and Education Act, as proposed for consideration under suspension of the Rules of the House.

The Committee on International Relations recognizes the importance of H.R. 1674 and the need for the legislation to move expeditiously. Therefore, I will not stand in the way of floor consideration. This, of course, is conditional on our mutual understanding that nothing in this legislation or my decision to allow the bill to come to the floor waives, reduces or otherwise affects the jurisdiction of the Committee on International Relations, and that a copy of this letter and your letter in response will be included in the **CONGRESSIONAL RECORD** when the bill is considered on the House Floor.

Thank you for your attention to this matter.

Sincerely,

Henry J. Hyde, Chairman.